SYSTEM FOR OBTAINING PRINT AND OTHER HAND CHARACTERISTIC INFORMATION USING A NON-PLANAR PRISM

ABSTRACT OF THE DISCLOSURE

A system and method include a non-planar prism and a scanning imaging system configured to locate and/or scan all or part of a hand print for one or more hands positioned on a curved portion of the non-planar prism. The curved portion can be symmetrical about an axis of symmetry of the non-planar prism. Typically, a print pattern on a palm pocket, a writer's palm, or the like, is hard to capture on a flat surface. In contrast, the non-planar prism of the present invention provides a form so that a print pattern on the palm pocket, writer's palm, or the like, can be captured. Print patterns or different parts of a hand (e.g., fingertips and a writer's palm) are also more easily captured using the non-planar prism. Hand and/or finger characteristic data can also be captured, for example hand geometry (e.g., finger lengths and spacing between fingers). The scanning imaging system can be stationary or it can be rotated along an arcuate scan path about a centerline axis of the optical element. During the rotation, an image of the full hand print (including thenar, hypothenar, inter digital, palm heel, palm pocket, and fingertips) and/or full palm and finger prints can be captured.